

### REMARKS

This Amendment and Request for Reconsideration is filed in response to the Final Office Action mailed on 11 September 2007 for the subject patent application.

In the present Amendment, the Applicants amend claims 1, 3-9, 11-20, and 23-39; no claims have been added or canceled. The Applicants respectfully submit that no new matter has been added by this Amendment; the subject matter claimed is fully supported in the present application as originally filed. The Applicants respectfully request entry of this Amendment and reconsideration of the claims as amended.

*In the Office Action mailed on 11 September 2007 for the present application, the Examiner rejected claims of the application under 35 U.S.C. § 103 based on Feder et al. (U.S. Patent Application Publication 2004/0142693), Einola et al. (International Publication WO 01/22764 A1), Kingdon et al. (U.S. Patent No. 6,047,183), and Pecan et al. (U.S. Patent Application Publication 2004/0097233). In response, the Applicants respectfully disagree with the rejection of the claims and submit that the claims as amended are allowable over the prior art of record for at least the following reasons.*

For proper rejection of claims under 35 U.S.C. § 103, the prior art in combination must teach or suggest each and every limitation of the claims. In addition, there must be some adequate suggestion or motivation to combine the teachings of the prior art.

Regarding Claims 1-6, 11-17, 23-29, and 36-37. The prior art in combination fails to teach or suggest each and every step recited in the claims 1-6, 11-17, and 23-29 as amended, and there is no adequate suggestion or motivation to modify the selection technique of Feder et al. to include a “2G” network in its decision-making process.

Specifically with respect to claims 1-6, 11-17, and 23-29, the prior art in combination fails to teach, suggest, or render obvious the steps of “identifying, at the mobile station, that a first cellular base station transceiver system identified from the scanning provides a Third Generation (3G) or greater communication service” and

“identifying, at the mobile station, that a second cellular base station transceiver system identified from the scanning fails to provide the 3G or greater communication service but provides a communication service that is less than the 3G or greater communication service” such as “a Second Generation (2G) communication service,” and then subsequently cause “the first cellular base station transceiver system to be selected for communication over the second cellular base station transceiver system based at least in part on identifying that the first cellular base station transceiver system provides the 3G or greater communication service and the second cellular base station transceiver system fails to provide the 3G or greater communication service.”

The focus of Feder et al. is the use of a *laptop computer* (see e.g. FIG. 1 of Feder et al.) which desires data services (not voice services) from a communication network. The Feder et al. reference is directed specifically to selection between *heterogeneous* wireless networks which provide data communication – specifically, between Third Generation (3G), 802.11 Wireless Local Area Network (WLAN), and Wireless Personal Area Network (PAN) systems. As stated in the Feder et al. reference in paragraph 19: “[t]he systems detected by the mobile station may include systems of a type, which is different than, and disparate (i.e., not compatible) with respect to, the system current serving the mobile station.” At the time of Feder et al., standards for selecting between *heterogeneous* wireless networks (e.g. for laptop computers) were not well-defined. This void left some opportunity for devising new selection techniques based on various preferences and desires of the user, some of which are described in the Feder et al. reference.

On the other hand, standards for cellular network selection of *cellular* networks for *mobile telephones* have already been well-defined and documented in cellular standards and specifications. This environment is the background and context of the present invention as defined in claims 1-6, 11-17, and 23-29. As is well-known, conventional techniques for handing-off between cellular base station cells have been *based on signal strength or quality*. For example, see paragraph 45 on page 5 of the present application as published:

...the mobile station will consider conventional handoff techniques (step 338 through a connector A1). When conventional handoff techniques are considered at step 338, the mobile station facilitates a handoff to the candidate system if its signal quality is stronger than the signal quality of the current system. Conversely, if the signal quality of the candidate system is not better than that of the current system, then a handoff to the candidate system is not initiated and communication is maintained with the current system. In the present embodiment, the signal quality of the candidate system is better or greater than that of the current system if the candidate's system is at least 2 dB greater than that of the current system.

The techniques of the present invention run contrary to traditional techniques for cellular network selection/handoff. Techniques of the present invention may be distinguished from conventional handoff techniques for cellular networks in that they “[identify], at the mobile station, that a first cellular base station transceiver system identified from the scanning provides a Third Generation (3G) or greater communication service” and “[identify], at the mobile station, that a second cellular base station transceiver system identified from the scanning fails to provide the 3G or greater communication service but provides a communication service that is” e.g. “a Second Generation (2G) communication service,” and then subsequently cause “the first cellular base station transceiver system to be selected for communication over the second cellular base station transceiver system based at least in part on identifying that the first cellular base station transceiver system provides the 3G or greater communication service and the second cellular base station transceiver system fails to provide the 3G or greater communication service.” This may be done “even if the signal quality [of the first cellular base station transceiver system] is less than that of the second cellular base station transceiver system” as previously claimed.

Again, the focus of Feder et al. is the use of a *laptop computer* (see e.g. FIG. 1 of Feder et al.) which desires data services (not voice services) from a communication network. The Feder et al. reference does not even address a cellular network that provides a communication service that is less than a 3G communication service such as a

Second Generation (2G) communication service. Further, it is not clear from the reference how the laptop computer would operate in the 2G network for data communications, for switching between 2G and 3G networks during such data communications. The “*silence*” in the Feder et al. reference regarding the application of 2G networks, and/or any similar selection or handoff techniques utilized between 2G and 3G networks, is more indicative of the failure of Feder et al. and one ordinarily skilled in the art to appreciate the present techniques as claimed. Clearly, there is no adequate suggestion or motivation for modifying the teachings of Feder et al.

Note that the Applicants have amended the claims to further distinguish the present invention from the prior art of record. All claims 1-6, 11-17, 23-29, and 36-37 as amended are directed to “*a mobile telephone configured for data communications and operative in accordance with a circuit-switched voice service and a packet data service.*” Again in contrast, the teachings in Feder et al. reference focus on a *laptop computer* which desires data services (not voice services) from a communication network for communications. As described, the laptop computer in Feder et al. desires and seeks out data-service-capable networks such as 802.11 (WLAN) networks, wireline-based (Internet) networks, or 3G networks, for its computer software applications. Put another way, the teachings and/or focus in Feder et al. reference does not extend from any traditional use of cellular voice networks (e.g. 2G voice-only networks) for network selection (see previous argument presented above).

Additional limitations are provided to even further distinguish the techniques of the present application applicable to 2G/3G cellular systems from the Feder et al. reference and other prior art of record. The mobile telephone configured for data communications of the present invention utilizes a single *cellular RF transceiver* for scanning while “measuring, from the scanning, a first energy-to-interference ratio  $E_C/I_O$  of the first cellular base station transceiver system” and also “measuring, from the scanning, a second energy-to-interference ratio  $E_C/I_O$  of the second cellular base station transceiver system.” The first cellular base station transceiver system may still be selected for communications over the second cellular base station transceiver system

“even if the first energy-to-interference ratio  $C/I_O$  is less than the second energy-to-interference ratio  $E_C/I_O$ ,” which runs counter to traditional cellular selection/handoff techniques.

Advantageously, a voice and data-capable mobile telephone of the present invention will maintain operation for communications with a 3G network over 2G networks, even when the 3G network has a lower signal quality over the available 2G networks.

Based on all of the above, there would be no adequate reason why one ordinarily skilled in the art would have modified the Feder et al. reference to obtain the claimed techniques. The Applicants respectfully request the Examiner to withdraw all rejections for claims 1-6, 11-17, 23-29, and 36-37 as amended.

Regarding Claims 7-10, 18-22, 30-35, and 38-39. The prior art in combination fails to teach, suggest, and render obvious the other claims as well. With respect to claims 7-10, 18-22, 30-35, and 38-39, the prior art in combination fails to teach or suggest the steps of “identifying, at the mobile station, that at least a first cellular base station transceiver system identified from the scanning provides a Third Generation (3G) or greater communication service for the mobile station” and “identifying, at the mobile station, that at least a second cellular base station transceiver system identified from the scanning fails to provide the 3G or greater communication service for the mobile station but provides a communication service that is less than the 3G or greater communication service” so that the mobile station can “[produce] and [send] a list of handoff candidate identifiers to a serving cellular base station transceiver system which includes a first identifier for the first cellular base station transceiver system but excludes a second identifier for the second cellular base station transceiver system based on identifying that the second cellular base station transceiver system fails to provide the 3G or greater communication service.”

Reasons provided above regarding the allowability of claims 1-6, 11-17, 23-29, and 36-37 also apply to claims 7-10, 18-22, 30-35, and 38-39, where and if applicable.

Further, the Kingdon et al reference does not teach or suggest a message that includes a first identifier for the first cellular base station transceiver system but excludes a second identifier for the second cellular base station transceiver system based on identifying that the second cellular base station transceiver system fails to provide 3G or greater communication service. Neither does the Feder et al. reference.

In the Office Action, the Examiner states that the “determination of excluding the BTSs from the list is based upon signal strength (read as provide the predetermined digital communication service). In this case the examiner interprets the meeting or exceeding the required signal strength to be equivalent to the failure or success of providing the predetermined communication service since when the signal strength does not exceed a threshold then the given BTS is incapable or ‘fails’ to provide said service.” In response, the Applicants respectfully disagree with the Examiner’s interpretation as being unreasonable, and submit that the Examiner’s must interpret the claim limitations as broadly as reasonable. In any event, the Applicants have revised the claim language. The mobile station of the present invention of claims 7-10, 18-22, 30-35, and 38-39 is operative to exclude the second identifier for the second base station transceiver system based on identifying that it fails to provide the 3G or greater communication service but provides a communication service that is less than the 3G or greater communication service. Advantageously, according to the present invention as defined by claims 7-10, 18-22, 30-35, and 38-39, the *mobile station* is adapted to provide such unique control and selection without any significant changes required in the networks. Based on all of the above, there would be no adequate suggestion or motivation to modify the Feder et al. reference to obtain the claimed techniques.

Thus the Applicants respectfully request the Examiner to withdraw all pending rejections for claims 7-10, 18-22, 30-35, and 38-39.

Based on all of the above, the Applicants respectfully submit that all claims as amended are allowable over the prior art of record, and the application is now in a condition suitable for allowance. The Applicants respectfully request entry of this Amendment, reconsideration of the claims as amended in light of the above arguments, and allowance of the application at the earliest opportunity.

Thank you. The Examiner is invited to contact the undersigned if necessary to expedite prosecution of the present application.

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Respectfully Submitted,

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